



IDS/ # 6  
8.21.02/1645

Patent  
270/070US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

P#6

In re the Application of:

Langenfeld, John

Serial No.: 10/044,716

Filed: January 11, 2000

For: BONE MORPHOGENETIC PROTEIN-2  
IN THE TREATMENT AND DIAGNOSIS OF  
CANCER

Group Art Unit: 1645

Examiner: Not Yet Assigned

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

In accordance with 37 CFR §§ 1.97 and 1.98, the items identified in this Information Disclosure Statement ("IDS") are brought to the attention of the Office. The items are listed on the attached form PTO-1449 and copies are enclosed for the convenience of the Examiner.

The items identified in this IDS may or may not be "material" pursuant to 37 CFR § 1.56. The submission thereof by Applicant is not to be construed as an admission that any such patent, publication or other information referred to therein is material or considered to be material (37 CFR § 1.97(h)), or even qualifies as "prior art" under 35 USC § 102 with respect to this invention unless specifically designated by Applicant as such.

INFORMATION DISCLOSURE STATEMENT FILING PROVISION:

This IDS is believed to be timely in that it is being submitted under 37 CFR § 1.97(b), that is (1) within three months of the filing date of the application, which is not a continued prosecution application

LA-240675.1

CERTIFICATE OF MAILING  
(37 C.F.R. §1.8a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231.

June 28, 2002  
Date of Deposit

Lena Dishakjian  
Name of Person Mailing Paper

*Lena B. Dishakjian*  
Signature of Person Mailing Paper-0

filed under § 1.53(d); or (2) within three months of entry of the national stage as set forth in 37 CFR § 1.491; or (3) before the mailing of a first Office action on the merits; or (4) before the mailing of a first Office action after filing a request for continued examination under § 1.114. Thus, no fee is required.

However, if the undersigned is in error in this regard, Applicant respectfully requests that the Office consider this IDS as filed under 37 CFR § 1.97(c), if applicable, and charge the fee due under 37 CFR § 1.17(p) to the deposit account referenced below.

The Commissioner is authorized to charge any fees required by the filing of these papers, and to credit any overpayment to Lyon & Lyon's Deposit Account No. 12-2475.

Respectfully submitted,  
LYON & LYON LLP

Dated: 6/28/02

By: 

Michael J. Wise  
Reg. No. 34,047



22249

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90071

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S  
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT:

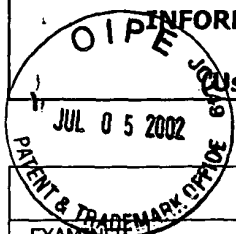
Langenfeld, John

FILING DATE:

01/11/02

GROUP:

1645



## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
AA						
AB						
AC						
AD						
AE						
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AG						
AH						

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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES NO
AI						
AJ						
AK						

## NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

AL	Abe et al., "Essential Requirement of BMPs-2/4 for Both Osteoblast and Osteoclast Formation in Murine Bone Marrow Cultures from Adult Mice: Antagonism by Noggin," J. of Bone and Mineral Res., Vol. 15, No. 4, (2000) pp. 663-673
AM	An et al., "Recombinant Human Bone Morphogenetic Protein-2 Induces a Hematopoietic Microenvironment in the Rat that Supports the Growth of Stem Cells," Experimental Hematology. Vol. 24, (1996) pp. 768-775
AN	Celeste et al., "Identification of Transforming Growth Factor $\beta$ Family Members Present in Bone-Inductive Protein Purified From Bovine Bone," Proc. Natl. Acad. Sci. USA, Vol. 87, (1990), pp. 9843-9847
AO	Cui et al., "BMP-4 is Proteolytically Activated by Furin and/or PC6 During Vertebrate Embryonic Development," The EMBO Journal. Vol. 17, No. 16, (1998), pp.4735-4743

## EXAMINER:

Not Yet Assigned

## DATE CONSIDERED:

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

**LIST OF PATENTS AND OTHER ITEMS FOR APPLICATION  
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AP	Cunnigham et al., "Osteogenin and Recombinant Bone Morphogenetic Protein 2B are Chemotactic for Monocytes and Stimulate Transforming Growth Factor $\beta$ 1 mRNA Expression," Proc. Natl. Acad. Sci. USA, Vol. 89, (1992), pp. 11740-11744
AQ	Erickson et al., "Recombinant Bone Morphogenetic Protein (BMP)-2 Regulates Costochondral Growth Plate Chondrocytes and Induces Expression of BMP-2 and BMP-4 in a Cell Maturation-Dependent Manner," J. of Orthopaedic Research, Vol. 15, (1997) pp. 371-380
AR	Liu et al., "Human Type II Receptor for Bone Morphogenic Proteins (BMPs): Extension of the Two-Kinase Receptor Model to the BMPs." Molecular and Cellular Biology, Vol. 15, No. 7, (1995), pp. 3479-3486
AS	Sakou et al., "Localization of Smads, the TGF- $\beta$ Family Intracellular Signaling Components During Endochondral Ossification," J. of Bone and Mineral Res., Vol. 14, No. 7, (1999), pp. 1145-1152
AT	ten Dijke et al., "Identification of Type I Receptors for Osteogenic Protein-1 and Bone Morphogenetic Protein-4," J. of Bio. Chem., Vol. 269, No. 25, (1994), pp. 16985-16988
AU	Vainio et al., "Identification of BMP-4 as a Signal Mediating Secondary Induction Between Epithelial and Mesenchymal Tissues During Early Tooth Development," Cell, Vol. 75, 1993, pp. 45-48
AV	Warburton et al., "The Molecular Basis of Lung Morphogenesis," Mechanism of Development, Vol. 92, (2000), pp. 55-81
AW	Weaver et al., "BMP Signaling Regulates Proximal-Distal Differentiation of Endotherm in Mouse Lung Development," Development, Vol. 126 (1999), pp. 4005-4015
AX	Willette et al., "BMP-2 Gene Expression and Effects on Human Vascular Smooth Muscle Cells," J. of Vascular Research, Vol. 36, (1999), pp. 120-125
AY	Wozney et al., "Novel Regulators of Bone Formation: Molecular Clones and Activities," Science, Vol. 242, (1988), pp. 1528-1534

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